apparatus with simple means? Dr. Guthrie's successors have not neglected the study of laboratory arts either, and anyone who has been connected with South Kensington must resent the suggestion that the desideratum here set forth is now capable of attainment for the first time. C. V. Boys.

MORAL EDUCATION.

(1) *Moral Instruction and Training in Schools.* Report of an International Inquiry. 2 vols. Edited by Prof. M. E. Sadler. Vol. i., pp. lviii+528; vol. ii., pp. xxviii+378. (London: Longmans, Green and Co., 1908.) Price 5*s*. net each.

(2) *Papers on Moral Education communicated to the First International Moral Education Congress.* (London: David Nutt, 1908.) Price 5*s*.

THE recent congress on moral education and the volumes which contain the results of the international inquiry upon the subject have rendered at least one great service to current educational thought. They have given us, on the one hand, a large amount of information on what is being done in various parts of the world in the matter of moral instruction and training, and, on the other hand, a series of valuable essays upon the various aspects of the problem as it presents itself to responsible persons, by means of which it is possible to examine some of the fundamental issues which are raised.

As Prof. Sadler frankly admits in his admirable preface to the committee's report, there is much variety of opinion expressed in its pages, and we may note at once that each of these many opinions is based upon experience. They furnish another illustration of the fact that successful experience is not always a safe guide in reaching scientific conclusions. Successful experience may even darken counsel! Witness the experience of those races who succeed in driving away the evil spirits who are attempting to destroy the light of the moon during an eclipse. In important matters of practice we are naturally eager to arrive at a guiding principle, and interest centres in the successes of this or that method. In our impatience to act, we do not wait to consider the failures, and we have no time to give to the wearisome analysis which aims at laying bare the elements that condition success and failure alike. Nevertheless, it remains a fact that, until this has been done, all procedure, even successful procedure, is little more than groping in the dark.

Such general agreement as is revealed in these volumes would perhaps be represented by a rather empty formula defining the aim of moral education, shall we say? to lead the individual to accept some principle which will give unity and meaning to his life. So soon as we step outside this or some similar statement, differences of a two-fold character are revealed. In the first place, we find them in the answers to the question, What is to be the nature of this unifying principle? "Service," says Mr. Gould; "the freedom of the inner life," says Prof. Foerster; whilst Dr. Penzig refuses teleological considerations any place in moral instruction, and others, again, would find the unifying principle in the conception of the active interest and supervision of a Divine Personality; and in the next place we find them when we inquire about the method to be followed in the effort to lead pupils to this principle. Here the differences are in part consequential upon the individual attitude to the previous question. It will make a world of difference, for example, whether the definitely religious point of view is accepted or not. But, leaving that particular difficulty aside, there remains the conflict between the advocates of the direct and systematic treatment of morals and those who favour indirect and incidental teaching. Both parties to the conflict admit the fundamental importance of training, of habit formation, but the former would have, in addition, definite lessons in the "oughts" of life, drawn from the consideration of concrete illustrations of virtuous and of foolish action, as told in story by the teacher. The point of view is precisely that of the teacher who wishes to establish a scientific law. The pupil is led to derive the law from the comparison of carefully chosen concrete examples. At a later stage various generalisations may be reviewed and compared with the view of arriving at a still more general principle, until finally the most widely embracing uniformities are conceived and formulated as "laws of nature."

This attitude towards the problem appears to rest on two assumptions. It seems to place moral law and physical law in the same category, and it seems to take for granted the child's capacity to analyse conduct and motive in the objective manner of some adults. It is not necessary to insist at length upon the difference between an ethical principle and a scientific generalisation. The ethical principle is a matter of personal adoption; it has a psychology and a meaning which differ fundamentally from the intellectual apprehension of a uniformity in the phenomenal world. There can be no analogy between the two such as would justify the statement that "the relation between indirect and direct moral instruction is the same as that between nature-study and science." The point is touched, though somewhat slightly, by M. Gabriel Séailles in a thoughtful paper read to the conference. Incidentally he also puts his finger upon the errors in psychology which not infrequently underlie the advocacy of the systematic treatment of the subject.

It is said, for example, that the children of poor districts are face to face with problems of gambling, intemperance, &c., and the school should come to their rescue by teaching them the wickedness of all these things that make up the daily life of their parents. As to the problems in the midst of which such children are said to find themselves, are the facts of their environment in any sense problems for the children? The lad who plays pitch and toss finds his problem in the effort to escape the vigilance of the policeman. A problem implies a contradiction felt in the actual experience of the individual. A contradiction between what the teacher says and the dominating facts of an out-of-school life will cause no more difficulty than the mathematical treatment of a space of four dimensions will affect my attitude to the facts

of my spatial environment. As M. Séailles puts it, the experience of the children of the poor may often be such that moral instruction will seem like fairy-tales, only not nearly so amusing. Where there is antagonism between life and the school, the handicap is heavily against the school, and we may doubt whether the weight of words will improve the chances of success.

What of the child in happier circumstances? Is not the teacher's moral analysis likely to be viewed as a rather futile attempt to find excuses for the obvious? Is there any more reason for the child why we should demonstrate the inherent evil in this or that course of conduct, or why we should trouble ourselves to urge the good upon him as superior to the evil, than that we should give him reasons for calling an orange yellow and not black?

The whole question of the attitude of the child to moral instruction has received relatively little scientific consideration. It is not easy to get at the facts. Mere reminiscence can never satisfactorily reveal them. We need some objective methods of inquiry such as have already been foreshadowed in the pedagogical experiments of Meumann and others. The development of purposefulness in action, the study of the working of contrariant ideas, the determination of types, the analysis of cases of moral degeneracy, may all in their turn help to raise the discussion of moral education to something more nearly approaching a scientific level.

The most striking cases of successful methods seem at present to come from the institutions engaged in the education of moral degenerates. The results of the reformatory and industrial school system offer striking testimony to the soundness of Prof. James's reply when asked what he would do to make education of greater ethical effect:—"Increase enormously the amount of manual training relatively to the book work." J. A. GREEN.

CLIMATE.

Climate, considered especially in Relation to Man. By Prof. Robert de Courcy Ward. Pp. xv+372. (London: John Murray, 1908.) Price 6*s*. net.

PROF. WARD explains in the preface to his book that its aim is "to coordinate and to set forth clearly and systematically the broader facts of climate in such a way that . . . the general reader, although not trained in 'the technicalities of the science,' may find it easy to appreciate them," while "the needs of the teacher and student have been kept constantly in mind." An introductory chapter, essentially a synopsis of the first six chapters of vol. i. of Hann's "Klimatologie," gives an outline of the climatic elements and of solar and physical climate. The classification of climates according to belts of latitude and the general distribution of land and sea is next dealt with, and to this section is added a brief account of some of the more elaborate subdivisions which have been proposed. Then follow sections on the characteristics of climate in the tropics, the temperate zones, and the polar zones; on the hygiene of the zones, and on the life of man in the zones; and a final chapter on changes of climate.

The basis of classification of climates actually adopted by the author, and employed in the second or applied section of his treatise, is thus primarily that of tropical, temperate, and polar zones, with boundaries defined by wind systems rather than by parallels of latitude or isothermal lines. Each zone is then subdivided according to the distribution of land and sea, giving as types marine, windward, and leeward coastal climates, interior climates, and, as a separate group, mountain climates. Experience has shown that, for general purposes, and particularly for elementary teaching, this method, in one form or another, is by far the most satisfactory, and it seems somewhat unfortunate that Prof. Ward does not state his own position more clearly and fully in his introductory chapters. The more elaborate methods, the description of which is here necessarily so condensed as to make difficult reading, are admittedly unsuitable for the purposes of the later sections of the book, and practically no use is made of them, but Prof. Ward deals with the method he himself employs in a couple of pages, and we are left in some uncertainty concerning his own views.

The descriptions given of the characteristics of the main climatic regions are admirable, and Prof. Ward has brought together an immense amount of illustrative matter which has hitherto been inaccessible to the ordinary reader. We could have wished, however, to see greater definiteness given to the normal position and extent of the major zones and their migrations by the insertion of a table similar to that given by Prof. Davis in his "Elementary Meteorology," showing the position of the equatorial belt and the trade wind belts at different seasons. Such a statement would, by the way, have made it easy to deal more adequately with the important question of the geographical and seasonal distribution of tropical cyclones. The distribution of monsoon regions seems also scarcely to receive the treatment it deserves; monsoon "belts" are discussed under the heading of tropical climates, the extension of monsoons in north-eastern Asia being merely referred to as an exception. The profound influence of the relief of the land in the production of monsoons and land and sea breezes is not emphasised, nor, in our opinion, is the importance of what may be termed "monsoonal influence" sufficiently recognised.

In the chapters describing the mode of life and occupations of mankind in different climates, Prof. Ward has again collected a wealth of illustration which affords extremely interesting reading, and will be of great value to the teacher. A good deal of matter, especially where the complex conditions of civilised life in the temperate zones are concerned, refers more to general geography than to climatology pure and simple, and considerable discussion might arise on the question of the precise significance of the climatic element in certain cases, but, on the whole, Prof. Ward avoids the dangerous pitfalls which beset this subject with great skill.